**To:** Ramaly, Todd[ramaly.todd@epa.gov]; Downey, Shannon[downey.shannon@epa.gov]; Breslin, Colin[breslin.colin@epa.gov]; Lambesis, Christopher[Lambesis.Christopher@epa.gov]
**Cc:** Swan, Kathleen[swan.kathleen@epa.gov]; Awanya, Francis[awanya.francis@epa.gov]; Schupp, George[schupp.george@epa.gov]; Argentieri, Sabrina[argentieri.sabrina@epa.gov]; Kane, Eleanor[kane.eleanor@epa.gov]
**From:** Mitsakopoulos, Greg
**Sent:** Wed 11/6/2013 10:22:35 PM
**Subject:** RE: Veolia 1310005

Todd, thanks for the info. Do you have an idea of what these are?:

VS2-Pb-13B-Grab1 ("10-80% Pb"; is it actually soil?) **(1310005-05)**

VS2-Cr-13B-Grab2 ("10-80% Cr"; is it actually aqueous?) **(1310005-06)**

Our Sample Coordinator was unable to read pH by test-strip for the VS2-Cr sample. I'll remark that CRL's chromium standard is very dark blue at a concentration of 1%. So if VS2, nominally 10-80% Cr, is not at least as dark, in my opinion, it is not that concentration. This is having not seen the sample myself, however.

Next to your minimum target RLs for As, Be, Cd, Cr, and Pb, I've listed CRL's ICP-AES RLs in green for the best-case-no-dilution scenario. Even then, for aqueous samples, our RL > target RL for As and Pb, and for soil/organic samples, our RL > target RL for As. Any dilutions needed will more than likely raise the remaining RLs beyond the target RLs. Also, it won't be possible to measure trace analytes at the target RLs against a backdrop of percent-level Cr and Pb, because of the need to dilute heavily to protect our trace-level instruments, and possible interelement interferences.

Colin, Francis, and Kathleen: I've cross-referenced our LIMS IDs in green next to our clients' field descriptors.

Thanks,

Greg

**From:** Ramaly, Todd
**Sent:** Wednesday, November 06, 2013 12:28 PM
**To:** Downey, Shannon; Breslin, Colin; Lambesis, Christopher
**Cc:** Mitsakopoulos, Greg; Swan, Kathleen; Awanya, Francis; Schupp, George; Argentieri, Sabrina; Kane, Eleanor
**Subject:** RE: Veolia 1310005

Hi all,

Chris and I have prepared responses to your questions below (**marked in Red).** Please let us know if you have any other questions.

Todd D. Ramaly

Environmental Scientist

RCRA/TSCA Permits Section

U.S. EPA Region 5

(312) 353-9317

(312) 582-5190 - fax

**From:** Downey, Shannon
**Sent:** Monday, November 04, 2013 4:13 PM
**To:** Breslin, Colin; Ramaly, Todd; Lambesis, Christopher
**Cc:** Mitsakopoulos, Greg; Swan, Kathleen; Awanya, Francis; Schupp, George; Argentieri, Sabrina; Kane, Eleanor
**Subject:** RE: Veolia 1310005

Colin, Greg, et al,

I have attached the profiles of the waste that the company submitted to us. These are basically summaries of the different wastes that were blended together during the CPT. They should hopefully answer most of your questions, except the density. I need to get back to you on that. I

do not know the proportions that these were added/mixed, but could potentially find out if you needed me to.

With regards to your question about what limits to use, you are correct that we are looking at the MACT. I have included a searchable version of that as well for you to reference.

Let me know if you have additional questions. I will do my best to answer them. Sorry I didn't get back to you sooner. I was out of the office last week, and was unable to turn on my out of office notification.

Shannon Downey
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Air Enforcement & Compliance Assurance Branch
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**From:** Breslin, Colin
**Sent:** Wednesday, October 30, 2013 9:14 AM
**To:** Ramaly, Todd; Lambesis, Christopher; Downey, Shannon
**Cc:** Mitsakopoulos, Greg; Swan, Kathleen; Awanya, Francis; Schupp, George
**Subject:** FW: Veolia 1310005

Hello,

We have begun work on the Veolia samples, and they are definitely interesting. Can you please provide as many answers as possible to Greg Mitsakopoulos' questions below? I am working on the mercury analysis and have a few of the same questions. It

will greatly help our analytical work.

In regards to the mercury analysis. I began preparing all of the liquid samples with our water SOP. The samples designated as mercury spikes can be analyzed by the water SOP, but based on my preparation observations of the other liquid samples (which I'm presuming are all non-aqeous) I will not be able to use the mercury water SOP. My next attempt will be to perform the analysis by the soil SOP, which will use ~0.5 g of liquid. Without knowing the liquid density the reporting units will be mg/kg. As in Greg's question below, are units of mg/kg acceptable or does the density need to be determined for units of mg/L?

Yes, mg/kg units are acceptable. Please note that the LowBtu samples are aqueous (see responses below).

Please let us know, thanks,

Colin Breslin

Chemist & Acting Sample Coordinator

U.S. EPA Chicago Regional Lab

536 S. Clark St. (ML-10C)

Chicago, IL 60605

312-886-2912

**From:** Mitsakopoulos, Greg
**Sent:** Tuesday, October 29, 2013 2:55 PM
**To:** Breslin, Colin
**Cc:** Swan, Kathleen; Awanya, Francis
**Subject:** Veolia 1310005

Colin,

Can you ask our client:

Any information they can furnish regarding the make-up of the solid samples and the liquid samples would be most helpful. I don't believe this info. is in the QAPP or SAP.

*Which of the liquids are aqueous?

10/23/2013-VeoliaS4-Metals-LBTU **(1310005-12)**

10/23/2013-VeoliaS4-DF-LBTU **(1310005-17)**

Which are mostly organic?

10/10/2013 – VS2-HBW-13B-COMP2C **(1310005-03)**

10/17/2013 – VS3-HBW-13B-COMP2C **(1310005-04)**

10/23/2013 – VeoliaS4-Metals-HBTU **(1310005-11)**

10/23/2013 – VeoliaS4-Metals-SCC **(1310005-10)**

10/23/2013 – VeoliaS4-DF-HBTU **(1310005-16)**

10/23/2013 – VeoliaS4-DF-SCC **(1310005-15)**

Are some of them "Previcur", as noted in the meeting?

All of the "mostly organic" liquids are mixtures of wastes. One of the wastes in the mixture may contain 0-5% propamacarb.

*Are the soils actually soil?

The following are all soils:

10/10/2013-Vs2-CS-13B-Comp2C **(1310005-01)**

10/17/2013-VS3-CS-13B-Comp2C **(1310005-02)**

10/23/2013- VeoliaS4-Metals-Box **(1310005-13)**

10/23/2013- VeoliaS4-DF-Box **(1310005-18)**

The following are soils mixed with a clay-like mineral product:

10/23/2013- VeoliaS4-Metals-Pit **(1310005-14)**

10/23/2013- VeoliaS4-DF-Pit **(1310005-19)**

*I appreciated the "high Cr" and "high Pb" notations, but is there any idea of their approximate level- are we talking percent-level, or ppm-level?

Both are percent-level, between 10-80%

*Are any other remarks available?

No.

*Mention that Metals Group plans on using our regular METALS025 hotblock technique on samples that are actually aqueous. We plan to proceed as requested on the organic samples to digest with METALS034/ 3050B hotplate & beaker.

What are the desired reporting units for the liquid samples? We'd need to acquire the density to convert client-requested liquids-digested-as-solids from mg/kg to ppm.

If you normally report liquids as mg/L or ug/L, could you also perform density so that we may convert the results?

What are the desired analytes and reporting limits?

**NOTE: ALL SOIL/SOLID SAMPLES MUST BE REPORTED ON AN AS-RECEIVED (a.k.a. WET-WEIGHT) BASIS**

Minimum target RLs. Lower RLs are encouraged. **(CRL METALS003 and 004 RLs; best-case)**

| Analyte | Aqueous (ug/L) | Soils/Organics (mg/kg) |
|---|---|---|
| As | 20 **(40; MDL 6)** | 2.0 **(4; MDL 0.8)** |
| Be | 10 **(2)** | 1.0 **(0.1)** |
| Cd | 5.0 **(2)** | 0.5 **(0.2)** |
| Cr | 10 **(5)** | 1.0 **(0.5)** |

| | | |
|---|---|---|
| Pb | 15 **(30; MDL 6)** | 2.0 **(1.5)** |
| Hg | 0.2 | 0.020 |

We will do our best to meet them, subject to the 0.5 g -> 50 mL implicit in the client-requested 3050B digestion, and the need for us to protect our instruments. We were told at the planning meeting that As, Be, Cd, Cr and Pb were desired, and that desired reporting limits would follow. I don't believe this info. in the QAPP or SAP. The QAPP makes mention of the Clean Air Act Maximum Available Control Technology (CAA MACT). Perhaps that's the reference that we are to use? **See above.**

Thanks,

Greg

Greg Mitsakopoulos

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